

Application No.: 09/707,269

Case No.: 53415US038

REMARKS

Claims 16, 19-26, 29-38, and 41-43 are pending. Reconsideration of the application in view of the following remarks is requested.

I. Claims 16, 19-26, 29-38, and 41-43 are Not Obvious over Kaufman et al. (U.S. Pat. No. 5,954,997) in view of Mueller et al. (U.S. Pat. No. 5,958,288)

Claims 16, 19-26, 29-38, and 41-43 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kaufman et al. in view of the Mueller et al.¹ Applicants request reconsideration of this rejection because the combination of Kaufman et al. and Mueller et al. do not teach or suggest a working liquid that comprises a buffer comprising a polyprotic protolyte having at least one pK_a greater than 7, as recited in Applicants' claims.

As a preliminary matter, Applicants note that the assertion in the Office Action that Kaufman et al. teach that a buffer is included in their slurry composition has been previously addressed during the course of the prosecution of the present application. In their response filed November 4, 2004², Applicants argued that the "benefit of controlling pH to a defined pH range through the use of a buffer is not at all apparent from Kaufman" (page 8, lines 20-22). The proceeding Office Action mailed February 1, 2005, did not include any rejections over Kaufman et al. Rather, the Office Action simply stated that Applicants' previous arguments were considered but were "moot" in view of new grounds of rejection. Accordingly, for reasons already of record and not addressed by the examiner, Applicants maintain that although Kaufmann et al. may have appreciated the desirability of generally controlling pH (i.e., adjusting the pH), the benefit of controlling pH to a defined pH range through the use of a buffer is not at all apparent from Kaufman.

Further, the present Office Action states that the alleged acid that acts as a buffer as reported by Kaufman et al. includes "the salt in equilibrium with the ionized acid" (Office

¹ Although rejected in the Office Action, claims 27, 28, and 39 have been canceled in the amendment filed by Applicants on November 15, 2005, and will not be addressed further in this response.

² Applicants' responses filed January 26, 2004, and September 2, 2003, also address this issue. Those arguments are not repeated herein, but continue to apply.

Application No.: 09/707,269

Case No.: 53415US038

Action, page 2, lines 17-19). Applicants disagree. As stated previously by Applicants, Kaufman et al. may report **components** of known buffering systems (e.g., acetic or phosphoric acid), but Kaufman et al. do not teach or suggest the use of a buffer.

Mueller et al. report a chemical mechanical polishing composition having an oxidizing agent and at least one catalyst with multiple oxidation states. Mueller et al. add no more than is already present in Kaufman et al. concerning the use of a buffer comprising a polyprotic protolyte having at least one pK_a greater than 7. Accordingly, the prior art references fail to teach or suggest all the claim limitations. For at least this reason, the rejection of claims 16, 19-26, 31, 36-38, and 41-43 as allegedly being unpatentable over Kaufman et al. in view of the Mueller et al. should be withdrawn.

Further, in order to establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There must also be a reasonable expectation of success when combining references. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. Nothing in the reported teachings of Kaufman et al. would motivate one to develop or use a working liquid of initial components that are substantially free of loose abrasive particles.

The Office Action alleges that the motivation to combine the teachings of Kaufman et al. with Mueller et al. arises because "the abrasive pad [reported by Mueller et al.] fulfills the function of the abrasive" (page 3, lines 12-13). Mueller et al., however, provide scant disclosure on the use of an "abrasive pad" and certainly do not provide proper motivation to replace abrasive particles in any slurry with an "abrasive pad". Moreover, the scant teachings of Mueller et al. do not provide any reasonable expectation of success when removing abrasive particles from slurries such as those reported by Kaufman et al.

The Office Action also alleges that the elimination of an element (i.e., abrasive particles) is obvious if the function of the element is not desired. Mueller et al., Kaufman et al., and the present application, however, all desire the abrading function of abrasive particles in their respective applications.

Application No.: 09/707,269

Case No.: 53415US038

For at least these reasons, the rejection of claims 16, 19-26, 29-38, and 41-43 under 35 U.S.C. § 103(a) over Kaufman et al. in view of the Mueller et al. should be withdrawn.

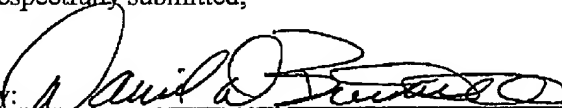
II. C onclusion

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested. The Examiner is invited to contact Applicants' undersigned representative with any questions concerning Applicants' application.

Respectfully submitted,

May 23, 2006
Date

By:



Daniel D. Biesterveld, Reg. No.: 45,898

Telephone No.: (651) 737-3193

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833